OMRON's Initiatives in the Environmental Business

July 30, 2013

Shizuto Yukumoto

Environmental Solutions Business HQ

First Choice for your Energy Innovation

Personal Introduction

Career History

1985	Entered OMRON Corporation	Sales
1999	Companywide Grand Design 2010 Project	Corporate Strategy HQ
2000	Industrial Automation Business Planning HQ	Planning HQ
2005	OMRON Europe B.V.	Senior General Manager, Planning HQ
2009	OMRON Europe B.V.	CEO
2012	Environmental Solutions Business HQ	Senior General Manager

Shizuto Yukumoto

Executive Officer, Senior General Manager,
Environmental Solutions Business HQ

Our Vision for the Environmental Business

Contribute to maximizing our customers' energy efficiency using our energy conversion and control technologies

● Customers' first choice
We want to be the first to be named when customers consider their energy efficiency.

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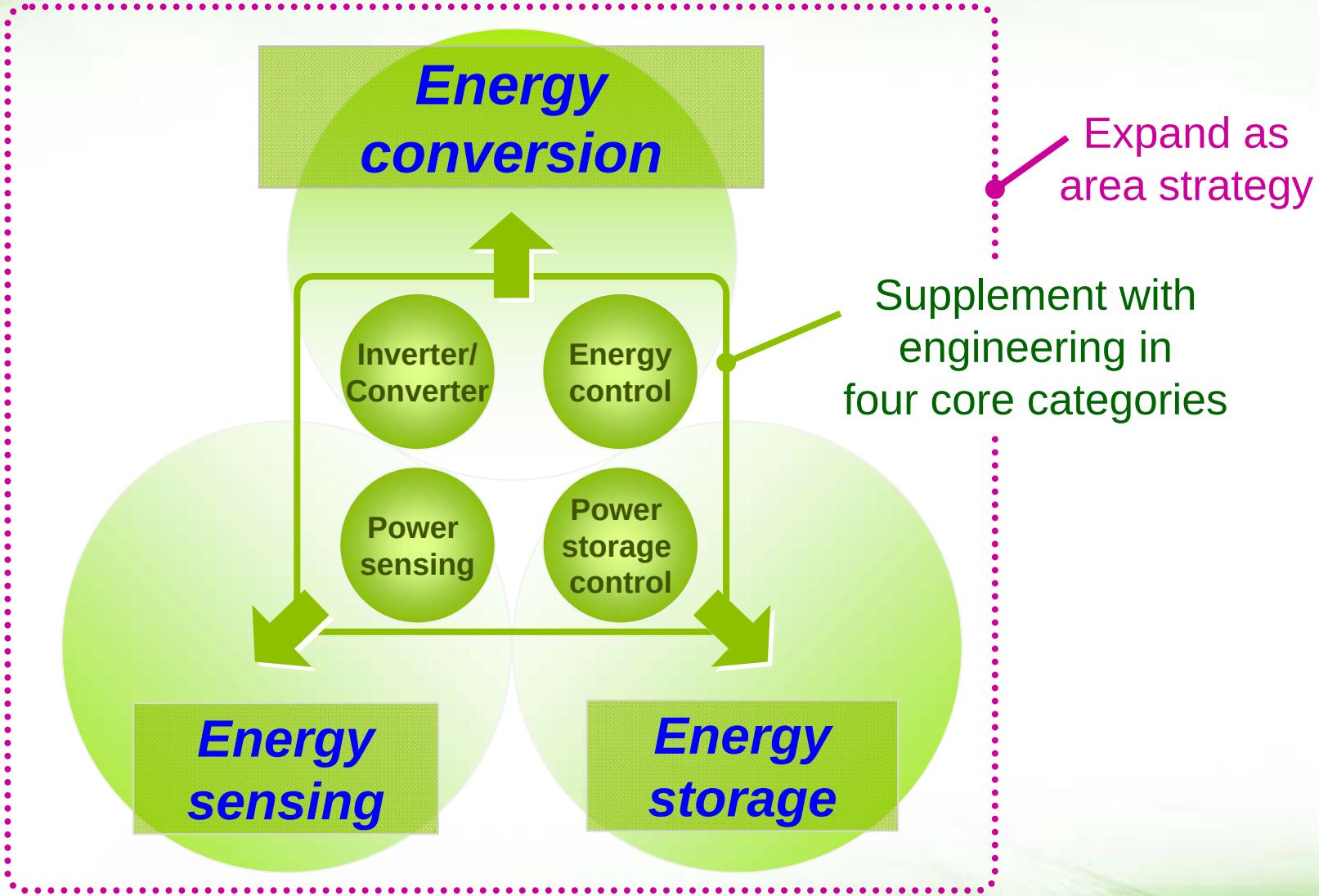
● Conversion and control technologies
The logo represents the two "C"s of energy conversion and control, Symbolizing our contribution to maximizing our customers' energy efficiency based on these two technologies.

● Support for our customers' businesses
We contribute to maximizing energy efficiency in the business activities of customers including power generators, systems integrators and panel manufacturers.

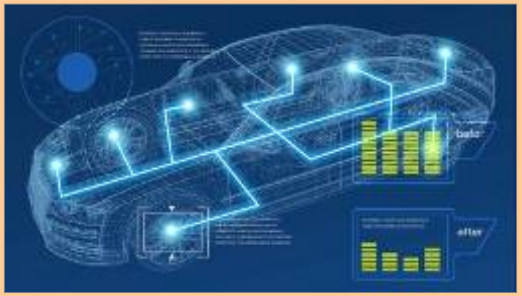
Three Domains of the Environmental Business



OMRON's Various Environmental Businesses

Business development in each business segment to maximize energy efficiency

Maximizing provision of clean energy	Achieving both productivity and energy savings	Promoting the spread of automobiles with reduced environmental impact
Solar power generation •Grid connection •PV(Photovoltaic) Inverter •O&M(Operation & Maintenance)	Energy-saving automated control •Factories •Facilities	In vehicles •Battery management



Contribute to maximizing our customers' energy efficiency
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High Growth Rate of Environmental Business (FY2012 Results)

159% | Growth rate of environmental business sales
(Solar power generation-related sales)

194% | Growth rate of sales of PV Inverters

162% | Growth rate of sales of power measurement sensors

Market share **33%** | Residential PV Inverters
Number one share in Japan

Note: OMRON estimate

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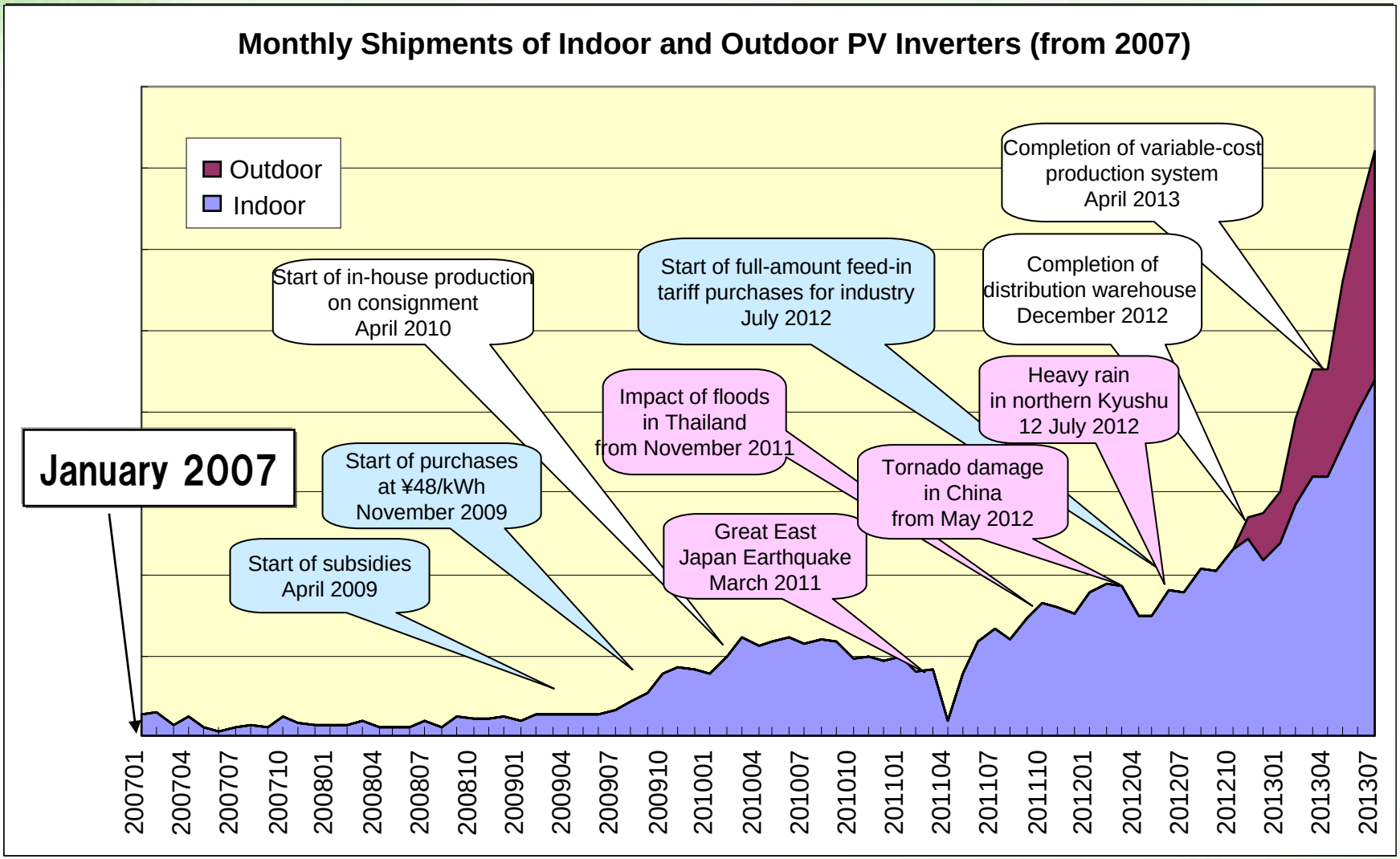
Change in OMRON's PV Inverters Production Volume



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Japan's PV Inverters Market: Growth Potential and Objectives

Japan's PV market trend: Dramatic growth (Middle market will continue to grow in FY2013)

We focus on the noteworthy residential market, which is not subject to the full-amount feed-in tariff system, and the low-voltage middle market of less than 50kW

Surplus buyback (less than10kW)

Residences/ Detached housing (New/existing 3-5kW range)

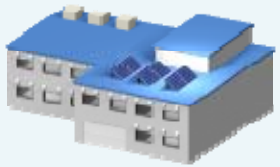
Feed-in tariff (full amount) (10kW or more)

Low-voltage middle (less than 50kW)

Complex housing/stores/small offices/idle land, etc.

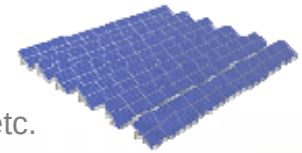
High-voltage middle (50kW or more)

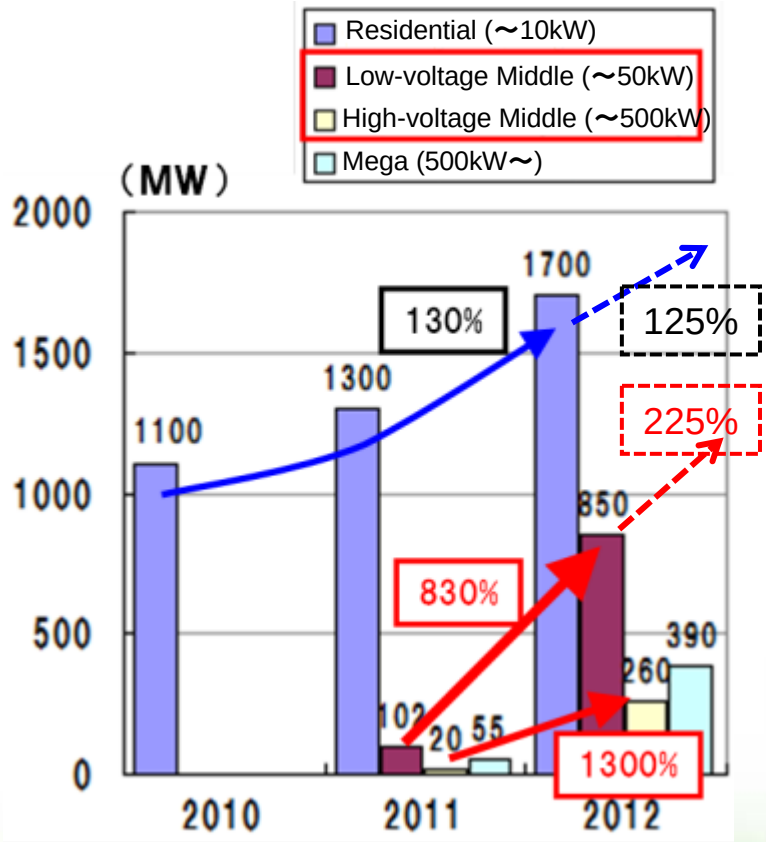
Medium-sized factories, etc. (50kW-500kW)



Mega, large-scale (500kW or more)

Power generation plants, etc.





PV Installed Capacity in Japan

Source: 2012 Fuji-Keizai Group Market Forecast

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Growth Scenario of Environmental Solutions Business

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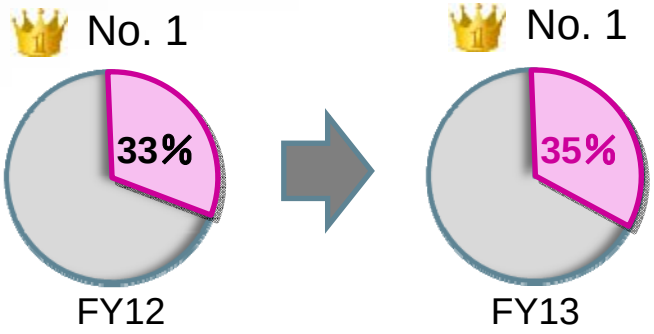
1. *Further strengthen our advantages to capture a predominant market share*

2. *Deploy our advantages in products and services to ensure economic scale and develop our domain*

3. *Strengthen our foundation for future growth*

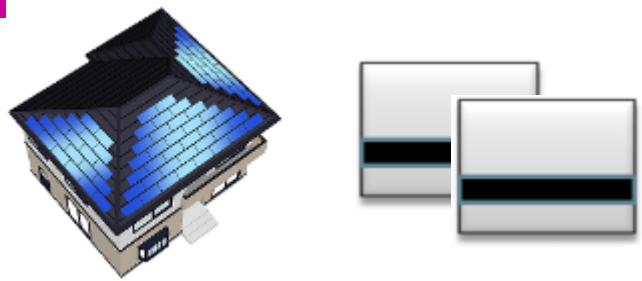
OMRON's Current Situation and Plan

Residential PV Invterter Market in Japan

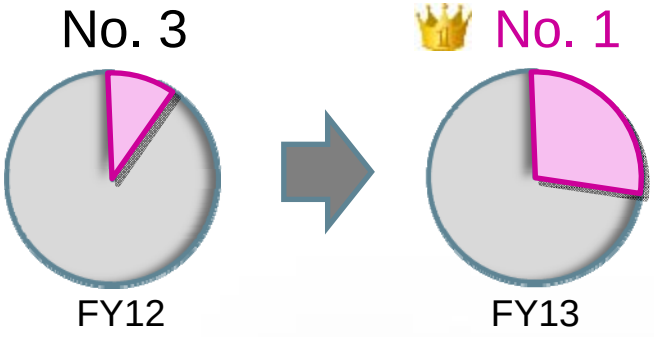


Market Share growth

Introduction of new products for new residential construction



Low-Voltage Middle Solar Power Market



Market Share growth

AICOT® -equipped outdoor PV Inverters

AICOT

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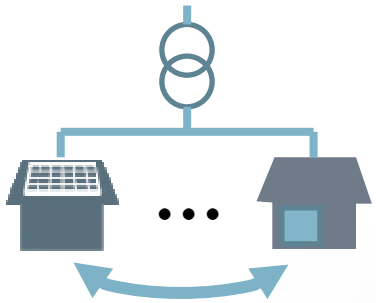
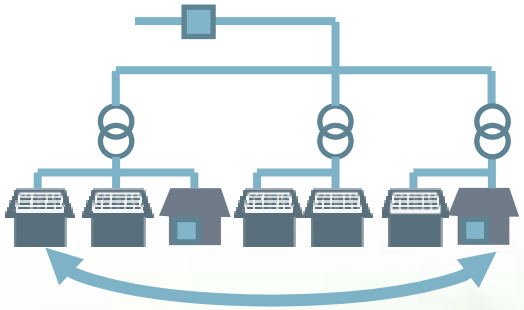
AICOT® : The Industry's First Grid Connection Technology

High-speed method eliminates mutual interference
No limit on the number of units connected because detection is possible beyond transformers

Conventional technology	AICOT® technology
Low-speed detection (0.5～1 second)	**High-speed** detection (0.2 second)
Reactive power feed volume is small and long-term → Possible inter-ference	Reactive power feed volume is large and short-term → No Inter-ference
Without going beyond the utility pole transformer, tests can be conducted on **up to 10 units** under the transformer	**No limit** on units connected beyond the transformer because variations in frequency can be detected
 → Does not go beyond the transformer	 → Goes beyond the transformer
Up to 10 units	No limit

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OMRON's Strength

Commercialization over an Eight-Year Period

Japan's first project to demonstrate clustered grid-interconnection

AICOT® Anti-Islanding Control Technology

Conducted the Demonstrative Project on Grid-Interconnection of Clustered Photovoltaic Power Generation Systems for an entire town since 2002

Pal Town Josai-no-Mori, Ota City, Gunma Prefecture

Established AICOT® to achieve one of the world's largest multi-unit interconnections with a total of 553 houses and a total output of 2,129kW

OMRON's Strength

Strengthening Engineering Capabilities at the "Solar Power Generation Dojo in Aso"

In pursuit of construction technology

Improving construction technology

Solar Power Generation Dojo in Aso

(Aso Solar Power Generation Training Center)

In pursuit of reliability

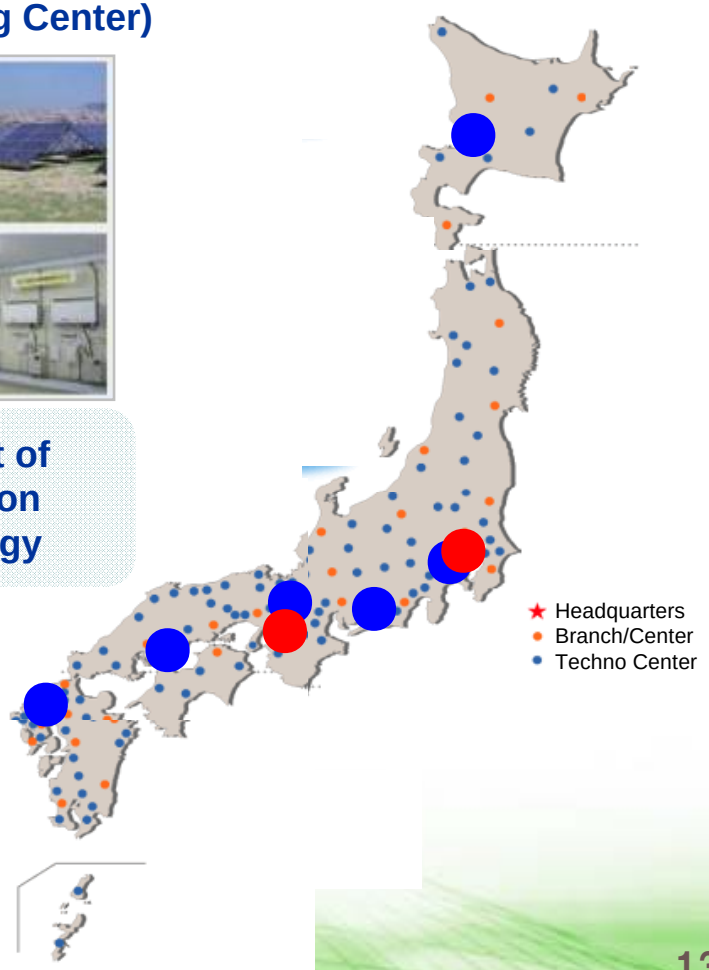
In pursuit of maintenance monitoring

In pursuit of application technology

Strengthening know-how and resources

Field service engineering
Nationwide bases/staff

140 / 1,200



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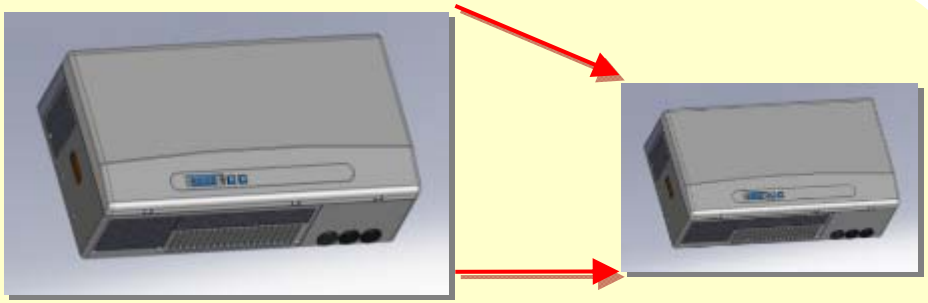
Enhancing Our Strength
Achievement of Core Technology for Next-Generation PV Inverters

- Completion of small-size, high-efficiency PV Inverter technology for new power devices
- Establishment of a platform for next-generation PV Inverters (small size, high efficiency)



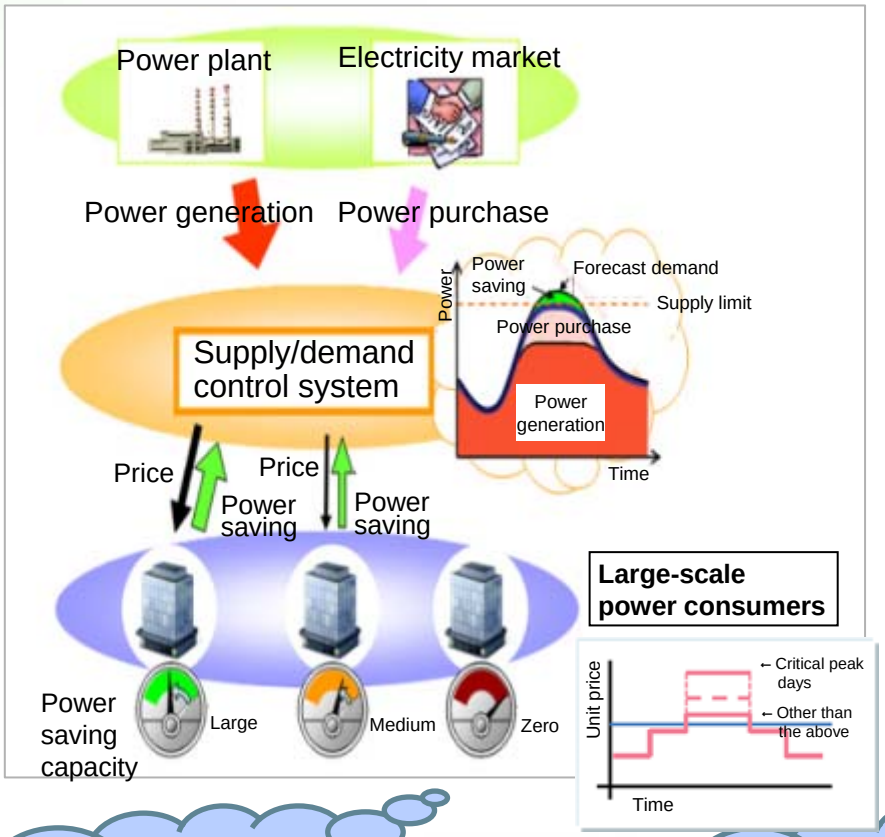
½ size

Trial manufacture/technology complete

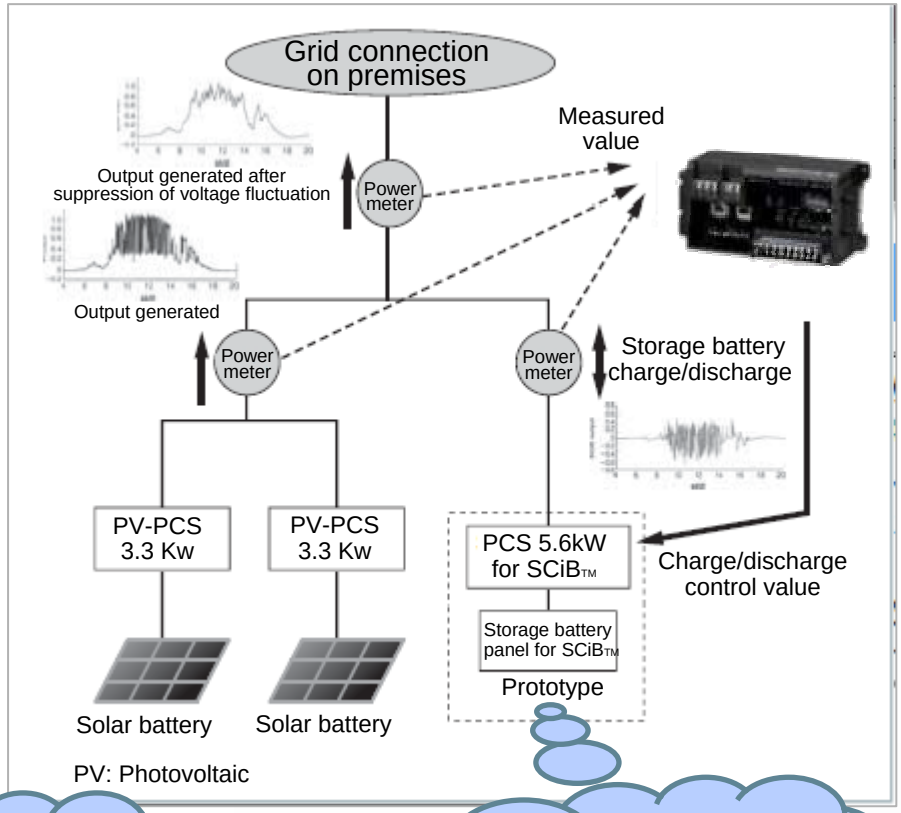
- Silicon carbide devices for high frequency and low loss
- Achieving high frequency enables smaller size
- Heat radiating, low electromagnetic interference design
- Sealed construction and moisture-resistant design with an IP34 rating

Preparing for Future Issues with the Expansion of Renewable Energy

Demand response will be necessary to achieve a balance of supply and demand.



Hybrid control (microgrid control) will be necessary for power creation/storage/saving for home consumption.



Match supply to demand

Match demand to supply (peak power cuts)

Home consumption control that stores energy

A Profitable Production Strategy

Variable cost-based production

Use of platform development to reduce variable costs

Monthly production of 30,000 units

(300% compared with 1H of FY12)

5-7% reduction in variable costs

Thank you for your confidence in our future growth.